

## STATEMENT OF QUALIFICATIONS

**Name of Lab:** Alaska Scientific Crime Detection Laboratory  
5500 E. Tudor Road  
Anchorage, AK 99507  
**Date:** June 5, 2009

**Name:** Michelle L. Collins (Gaines)  
**Job Title:** Forensic Scientist IV  
DNA Unit Supervisor  
AK CODIS State Administrator

**Discipline(s):** Forensic DNA Analysis

### Education:

Institution	Dates attended	Major	Degree completed
University of Alabama at Birmingham	1994-1996	Forensic Science	M.S.F.S.
Clarkson University Potsdam, NY	1990-1994	Chemistry	B.S.

### Other Training:

August 2008	<u>GeneMapper® ID-X v1.0 Software Training</u> , instructed by April Orbison, held at the Scientific Crime Detection Laboratory in Anchorage, AK (15 hours)
July 2008	<u>Expert Witness Testimony Techniques</u> , instructed by Ron Smith, held at the Alaska Scientific Crime Detection Laboratory in Anchorage, AK (16 hours)
June 2008	<u>Workshop for Laboratories Embarking on Validation of an Expert System</u> , held at the Holiday Inn in Indian Rocks Beach, FL (11 hours)
December 2007	<u>Valuing Diversity</u> , instructed by Erin Shepherd-Ham, held at the Alaska Division of Personnel training facility in Anchorage, AK (6.5 hours)
December 2007	<u>Performance Appraisal: The Basics</u> , instructed by Kimberly Gialopsos, held at the Alaska Division of Personnel training facility in Anchorage, AK (7.5 hours)
October 2007	<u>Academy for Supervisors</u> , instructed by Timothy Parker, held at the Alaska Division of Personnel training facility in Anchorage, AK (37.5 hours)
September 2007	<u>Performance Coaching</u> , instructed by Timothy Parker, Workshop at the Alaska Division of Personnel training facility in Anchorage, AK (7.5 hours)
February 2006	<u>Advanced Topics in STR DNA Analysis</u> , instructed by John M. Butler, PhD and Bruce R. McCord, PhD, Workshop at the Annual AAFS Meeting held in Seattle, WA (7.25 hours)
October 2005	<u>CODIS v5.7.2 Training</u> , instructed by Meghan Carlin and Inez Kendall (SAIC), held at the SAIC facility in McLean, VA (36 hours)
September 2005	<u>DNA Auditor Training</u> , instructed by Richard A. Guerrieri and Heather Seubert (FBI), held at the Wingate Inn in Stafford, VA (14 hours)

**Other Training:** (continued)

August 2005	<u>Statistical Analysis of Forensic DNA Evidence</u> , instructed by George Carmody and Ray Wickenheiser, held at the State of Alaska Scientific Crime Detection Laboratory in Anchorage, AK (30 hours)
August 2004	<u>Death Investigation Seminar</u> , sponsored by and held at the State of Alaska Medical Examiner's Office in Anchorage, AK (5 hours)
March 2004	<u>Quantitative PCR Seminar</u> , In-house training by Stratagene, Scientific Crime Detection Laboratory in Anchorage, AK (4 hours)
December 2003	<u>Quantitative Methods Using RT-PCR</u> , On-line seminar by Stratagene, Scientific Crime Detection Laboratory in Anchorage, AK (1.5 hours)
December 2003	<u>CODIS Talk: NDIS DNA Data Acceptance Standards</u> , instructed by Chris Beheim at the Scientific Crime Detection Laboratory in Anchorage, AK (1.5 hours)
February 2002	<u>Forensic Photography</u> , instructed by Robert Carruthers, Workshop at the Annual AAFS Meeting held in Atlanta, GA
January 2001	<u>Effective Courtroom Communication Skills</u> , instructed by Raymond J. Davis and Louis A. Maucieri, held at the Louisiana State Police Training Facility (3 days)
September 2000	<u>Forensic Biological Microscopy</u> , instructed by Edwin Jones, held at the North Louisiana Criminalistics Laboratory (1 week)
August-December 1999	<u>Statistics and Population Genetics for Forensic DNA Analysis</u> , instructed by Dr. Bruce Weir, Graduate level internet course.
February 1999	<u>DNA Proficiency Testing as a Quality Assurance Tool</u> , various instructors, Workshop at the Annual AAFS Meeting held in Orlando, FL.
February 1999	<u>Internet for Forensic Scientists</u> , various instructors, Workshop at the Annual AAFS Meeting held in Orlando, FL.
February 1998	<u>Developments in Trace Evidence Examinations: Interpretation of Material Transfers</u> , various instructors, Workshop at the Annual AAFS Meeting held in San Francisco, CA.
October 1997	<u>Forensic Microscopy</u> , instructed by John Delly of the McCrone Research Institute, held at the North Louisiana Criminalistics Laboratory. (1 week)
September 1997	<u>Presenting DNA Statistics in Court</u> , instructed by George Carmody and Bruce Weir, Workshop at the 8 <sup>th</sup> International Symposium on Human Identification in Scottsdale, AZ.
February 1997	<u>Advanced DNA Technologies: Automation and Application</u> , various instructors, Workshop at the Annual AAFS Meeting held in New York City, NY.
October 1996	<u>STR Technology</u> , various instructors, Workshop at the Fall 1996 AAFS Meeting held in Raleigh, NC.

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October 1996                      Chemiluminescence Workshop, various instructors, Workshop at the Fall 1996 SAFS Meeting held in Raleigh, NC.

August 1996                      Bloodstain Pattern Interpretation, Instructed by Paulette Sutton, Steven A. Symes and Lisa Elrod, held at the North Louisiana Criminalistics Laboratory. (1 week)

**Courtroom Experience:**      Qualified as an expert in Forensic DNA Analysis in Alaska and Louisiana (>70 times in 13 years)

**Professional Affiliations:**

American Academy of Forensic Sciences (AAFS)  
Southern Association of Forensic Scientists (SAFS) (former member)  
Louisiana Association of Forensic Scientists (LAFS) (former member)

**Employment History:**

- (1)      Job Title:              Forensic Scientist IV  
         Employer:            Alaska Department of Public Safety Scientific Crime Detection Laboratory  
         Anchorage, Alaska  
         Principal Duties:      Supervise the CODIS unit of the laboratory. Serve as the AK State CODIS Administrator. Perform DNA analysis on forensic casework. Perform scientific techniques in the identification of body fluids, i.e., blood and semen. Perform validations, technical and administrative review of validations and casework, prepare written reports and provide expert witness testimony.  
         Tenure:                  11/07 - present
- (2)      Job Title:              Criminalist III  
         Employer:            Alaska Department of Public Safety Scientific Crime Detection Laboratory  
         Anchorage, Alaska  
         Principal Duties:      Perform DNA analysis on forensic casework. Perform scientific techniques in the identification of body fluids, i.e., blood and semen. Perform validations, technical and administrative review of validations and casework, prepare written reports and provide expert witness testimony.  
         Tenure:                  09/03 – 11/07
- (3)      Job Title:              Forensic Scientist I/II  
         Employer:            North Louisiana Criminalistics Laboratory  
         Principal Duties:      Evidence storage, tracking and examination – DNA analysis by PCR method, STR typing using a 377 DNA Sequencer and GeneScan and GenoTyper software, report preparation and court testimony, validation of methods and reagents, technical review of DNA case files, purchasing of reagents and supplies for the DNA section, Administrative review and organization of proficiency testing for the DNA section, conducting internal laboratory audits to ensure compliance with ASCLD/LAB requirements, method and protocol development.  
         Tenure:                  07/01/1996 – 06/30/2003
- (4)      Job Title:              Student Intern  
         Employer:            Alabama Department of Forensic Sciences  
         Principal Duties:      Processed blood samples for the Combined DNA Index System (CODIS) and assisted in validation of Restriction Fragment Length Polymorphism (RFLP) typing.  
         Tenure:                  09/95 – 05/96
- (5)      Job Title:              Graduate Assistant

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Employer: University of Alabama at Birmingham  
Principal Duties: Conducted research on the external vs. internal cocaine contamination of hair.  
Tenure: 08/94 – 08/95

**Other Qualifications:**

Workshops and Classes Taught:

09/27/99: Interpreting STR Results of Mixed Samples, Workshop at the SAFS Fall 1999 Meeting in Myrtle Beach, SC  
01/11 – 15/99: DNA Evidence: Evaluating, Interpreting, Reporting & Presenting, Class at the North Louisiana Criminalistics Laboratory in Shreveport, Louisiana.  
05/25/98: Implementation of DNA in the Forensic Laboratory, Workshop at the SAFS Spring 1998 meeting in New Orleans, LA  
08/11-15/97: Forensic DNA Analysis, Class at the North Louisiana Criminalistics Laboratory in Shreveport, Louisiana.

MEETINGS ATTENDED:

Familial Searching and Genetic Privacy Symposium  
CODIS State Administrator's Meeting  
March 2008 – Arlington, VA  
13<sup>th</sup> National CODIS Conference and CODIS State Administrators Meeting  
October 2007 – San Francisco, CA  
CODIS State Administrators Meeting  
May 2007 – Las Vegas, NV  
12<sup>th</sup> National CODIS Conference and CODIS State Administrators Meeting  
October 2006 – Arlington, VA  
11<sup>th</sup> National CODIS Conference  
November 2005 – Arlington, VA  
10<sup>th</sup> National CODIS Conference  
November 2004 – Arlington, VA

Association of Forensic DNA Analysts and Administrators  
July 2002- Austin, Texas

American Academy of Forensic Sciences  
February 2006 – Seattle, Washington  
February 2002 – Atlanta, Georgia  
February 1999 – Orlando, Florida  
February 1998 – San Francisco, California  
February 1997 – New York City, New York  
February 1996 – Nashville, Tennessee

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Southern Association of Forensic Scientists  
Spring 2001 – Williamsburg, Virginia  
Fall 2000 – Asheville, North Carolina  
Fall 1999 – Myrtle Beach, South Carolina  
Spring 1998 – New Orleans, Louisiana  
Fall 1996 – Raleigh, North Carolina

Louisiana Association of Forensic Scientists  
Winter 2001–Shreveport, Louisiana  
Winter 2000 –New Orleans, Louisiana

Winter 1999 –Alexandria, Louisiana  
Spring 1998 –New Orleans, Louisiana  
Fall 1997 –Alexandria, Louisiana  
Winter 1997 –W. Monroe, Louisiana

8<sup>th</sup> International Symposium on Human Identification  
Fall 1997–Scottsdale, Arizona

**Other Qualifications:** (continued)

PRESENTATIONS:

February 2006: “Blood Brothers”: A Case of “Identical Non-Twins”, AAFS Meeting, Seattle, WA.

July 2002: Reduced Volume PCR Amplification Reactions Using the AmpF/STR<sup>®</sup> Profiler Plus<sup>™</sup> Kit, Association of Forensic DNA Analysts and Administrators, Austin, TX.

February 2002: Reduced Volume PCR Amplification Reactions Using the AmpF/STR<sup>®</sup> Profiler Plus<sup>™</sup> Kit, AAFS Annual Meeting, Atlanta, GA.

April 2001: Validation of Reduced Volume PCR Amplification Reactions Using the AmpF/STR<sup>®</sup> Kits, SAFS Meeting, Williamsburg, VA.

February 1999: Internal Validation of the AmpF/STR<sup>®</sup> Profiler Plus<sup>™</sup> and COfiler<sup>™</sup> PCR Amplification Kits, AAFS Meeting, Orlando, FL.

February 1999: A Validation Regimen in the DNA Laboratory, LAFS Meeting, Alexandria, LA.

September 1997: Validation of AmpF/STR<sup>®</sup> Blue, Green I, and Profiler, 8<sup>th</sup> International Symposium on Human Identification, Scottsdale, AZ.

October 1996: The Effect of *Hae* III Digestion on PCR Based Typing Systems, SAFS Meeting, Raleigh, NC.

PUBLICATIONS:

**Reduced Volume PCR Amplification Reactions Using the AmpF/STR<sup>®</sup> Profiler Plus<sup>™</sup> Kit**, Journal of Forensic Sciences (2002) 47(6): 1224-37; Gaines ML, Wojtkiewicz PW, Valentine JA, Brown CL.

**Preparation and Evaluation of Arylazide-Substituted Pyridine Adenine Dinucleotides for Photoaffinity Labeling Experiments**, Photochemistry and Photobiology (1996); 63(6): 793-799; Liu W, Gaines M, Bao R, Clifford J, Li Y.

**High Performance Liquid Chromatographic Analysis of Enantiomeric Composition of Abused Drugs**, Forensic Sci Rev (1996); 8(2): 91-109; Sellers JK, Duffit GL, Gaines ML, Liu RH.